

## Methicillin-resistant Staphylococcus Aureus (MRSA)

### ❑ WHAT IS A STAPH SKIN INFECTION?

- ✓ *Staphylococcus aureus* (or *S. aureus*), also called staph, are bacteria commonly found on human skin; common places include inside the nose, in the armpit, groin, and genital area.
- ✓ When bacteria are found on the skin but do not cause illness it is called "colonization." When the bacteria do cause illness the person is said to be "infected" with staph.
- ✓ In most cases, staph either do not cause any problems or cause minor infections, such as pimples or boils. In some cases, staph can cause more serious infections.

### ❑ WHAT IS MRSA?

Some staph bacteria are resistant to certain antibiotics. Methicillin-resistant *S. aureus* (MRSA) are resistant to the antibiotic methicillin and related antibiotics. Other antibiotics can be used to treat MRSA, but treatment may take longer and/or be more expensive.

### ❑ WHAT ARE THE SYMPTOMS?

People who are colonized with staph or MRSA do not have any symptoms. Staph skin infections often begin with an injury, which allows the bacteria to enter the skin and develop into an infection. Symptoms include:

- ✓ Redness, warmth, swelling, tenderness of the skin, and boils or blisters.
- ✓ Staph infections are sometimes mistaken for spider bites.
- ✓ Some people may also have fever and chills.

### ❑ HOW DOES MRSA SPREAD?

- ✓ Staph infections including MRSA are spread by close contact with infected people. Staph can rub off the skin of an infected person onto the skin of another person during skin-to-skin contact. Staph can also come off the infected skin of a person onto a shared object or surface, and get onto the skin of the person who uses the object next.
- ✓ Examples of shared objects that might spread staph include personal hygiene objects (e.g., towels, soap, wound-dressings, bandages, etc.) sheets, clothes, benches in saunas or hot tubs, and athletic equipment.

In other words, anything that could have touched the skin of a staph-infected person can carry the bacteria to the skin of another person.

### ❑ WHO IS AT RISK FOR A MRSA INFECTION?

- ✓ MRSA infections are more common among persons who have the following risk factors:
  - Recurrent skin diseases or open wounds,
  - Long-term illness or long-term dialysis patients,
  - Illicit injecting drug use,
  - Been a patient in the hospital or other health care facility within the past year,
  - Contact with other persons with MRSA infection,
  - Recent antibiotic use, or
  - Live in crowded settings.
- ✓ MRSA can also cause illness in healthy people who have not been patients in hospitals.
- ✓ MRSA infections have also been reported among injecting drug-users, persons in prisons, players of close-contact sports, men who have sex with men and other populations.

### ❑ HOW IS MRSA DIAGNOSED?

- ✓ A sample of the infected area (for wounds, usually taken with a swab) is used to grow (culture) the staph bacteria in the laboratory.
- ✓ Tests are then done to determine which antibiotics are active for treating the infection.
- ✓ A culture of infected skin is especially useful in recurrent, persistent, or severe infections and in cases of antibiotic failure.

### ❑ HOW IS MRSA TREATED?

- ✓ Most MRSA infections can be treated successfully with proper wound and skin care and by using antibiotics active against MRSA. If antibiotics are needed, they can usually be given by mouth.
- ✓ A procedure by a healthcare provider to drain pus from the infected area (called incision and drainage or "I & D") may be necessary.
- ✓ Some MRSA infections can be difficult to treat and can progress to serious and possibly life-threatening infections. Serious MRSA infections may require intravenous (given through a vein) antibiotic treatment.

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**(HOW IS MRSA TREATED?, continued)**

- ✓ People who are colonized *but not infected* with MRSA do not usually need to be treated.

**❑ HOW CAN I PROTECT MYSELF FROM BECOMING INFECTED WITH STAPH?**

- ✓ Keep your hands clean by washing thoroughly with soap and water. Cover and rub all surfaces of the hands. Lather and rub for at least 10 seconds. Alternatively, if there is no visible dirt on the skin, alcohol-based hand sanitizers (containing at least 60% ethyl alcohol) can be used to clean hands.
- ✓ Keep cuts and abrasions clean and covered with a clean bandage until healed.
- ✓ Avoid contact with other people's wounds or material and surfaces contaminated from wounds.
- ✓ Avoid skin-to-skin contact with persons who have skin infections.
- ✓ Do not share personal items (e.g., towels, washcloth, razor, clothing, or uniforms) with other persons.
- ✓ Clean objects and surfaces that are shared with other persons, such as athletic equipment, before you use them.

**❑ IF I HAVE A MRSA OR STAPH SKIN INFECTION, HOW CAN I KEEP FROM SPREADING IT TO OTHERS?**

- ✓ Keep infections covered with clean, dry bandages. This is especially important for infections that continue to produce pus or to drain material.
- ✓ Follow your health care provider's instructions on proper care of the wound. Pus from infected wounds can contain bacteria and spread the infection to others.
- ✓ Wash hands (as described above) after touching infected skin and bandages. Put disposable wastes (e.g., dressings, bandages) in a separate trash bag and close the bag tightly before throwing it out with the regular garbage.
- ✓ Advise your family and other close contacts to wash their hands frequently. Caregivers should use gloves, and wash hands afterwards, if they change your bandages or touch the infected wound or other objects that have been in contact with the wound or wound drainage.

- ✓ Do not share personal items (e.g., towels, washcloth, razor, clothing, or uniforms) or other items that may have had contact with the infected wound or wound drainage.
- ✓ Disinfect all non-clothing (and non-disposable) items that come in contact with the wound with a solution of one tablespoon household bleach mixed in one quart of water (must be prepared fresh each day) or a phenol-containing store-bought cleaning product.
- ✓ Wash linens and clothes that become soiled with hot water and laundry detergent. Drying clothes in a hot dryer, rather than air-drying, also helps kill bacteria in clothes.
- ✓ Wash utensils and dishes in the usual manner with soap and hot water or using a standard home dishwasher.
- ✓ Avoid participating in contact sports or other skin-to-skin contact until your infection has healed.
- ✓ If you have a MRSA infection, be sure to tell any health care providers who treat you that you have this infection.

**❑ WHAT SHOULD I DO IF I THINK I HAVE A STAPH SKIN INFECTION?**

- ✓ If you suspect that you might have a staph skin infection, consult your health care provider as soon as possible. Early treatment can help prevent the infection from getting worse. Be sure to follow closely all instructions from your healthcare provider and if prescribed antibiotics, take all of your pills, even when you start to feel better.

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